PRALINES

SPECIFICATIONS

Power Supply (not included):

DC 9V 200mA center negative

Size: 19x13x5 cm

Weight: 0,8 Kg

Relay true bypass

CV in: 0-5V

OVERVIEW

At the heart of PRALINES, there's a special filter which consists of 4 band-pass filters running in parallel.

Each filter frequency can be controlled independently. (FREQ)

Resonance however, is a global parameter for all 4 of the filters. (PEAK)

Filters can be blended with the dry signal. (MIX)

Modulation applied to filters frequency can be either envelope, LFO or expression pedal. (MOD)

The LFO speed can be controlled by envelope or expression pedal. (LFO CTRL)

A gated FUZZ helps add to the synth-like experience.

FILTERS

As said before, there is 4 parallel band-pass filters.

It's comparable to a double *EHX Bass-Balls* (which is 2 band-pass filters in parallel), or a quarter of a vocoder (which is 16 band-pass filters in parallel).

It could also be referred to as a formant filter

The frequency range of the filters goes from sub-bass up to mid-treble;

They were specifically designed not to oscillate at high frequencies preventing possible damage to your ears or speakers.

The **PEAK** knob controls the global resonance of this formant filter.

When fully CCW, the sound is soft/flat and it will act as a 4 band parametric equalizer.

Mixed with out-of-phase dry signal, phase cancellation occurs and it's capable of producing phaser/vibrato sounds.

As you increase the **PEAK** value, you increase the resonance of each band-pass filter and less phase cancelation occurs.

When fully CW, filters self-oscillation occurs and you now have 4 controllable sine-wave VCO's. You can even make nice chords!

FILTERS

The **FILTERS** knob is controlling the level of the filters, it's useful if you want to tame things in some situations.

The **MIX** knob is used to blend the dry signal with the filtered signal. Fully CCW is dry only and fully CW is filters only.

How to proceed with those 3 Knobs? (**PEAK**, **FILTERS**, **MIX**)

Set **MIX** knob fully CW, choose a **PEAK** value. (flat, colored or near self-oscillation), adjust **FILTERS** so that gain is consistent with your bypassed level, and use the **MIX** knob to blend it with your dry signal.

There are 4 small **FREQ** knobs, they set the base frequency of each filter.

The base frequency will then be modulated according to the 4 small **MOD** knobs.

The 4 **FREQ** knobs should not all be set to the exact same position.

This would result in unwanted self-oscillation, even with **PEAK** fully CCW.

Most of the time, what you'll want is 4 different base frequencies for your filters.

MOD

This rotary switch selects which modulation is applied to filters: envelope down, envelope up, LFO, expression pedal

In addition, it shifts the frequency range of each **FREQ** knob up or down.

envelope down = higher frequencies.

envelope up = lower frequencies.

LFO or expression pedal = mid frequencies.

ENVELOPE

SENS sets the sensitivity of the envelope generator.

Settings will vary according to your playing dynamics, your instrument (guitar/bass) or pickups (single coil/humbucker).

This envelope generator is followed by a slew limiter that will slow/smooth the envelope:

ATTACK slows down the attacks

DECAY slows down the decay

When increasing **ATTACK**, you may need to increase **SENS**

LFO

This is a simple triangle LFO with two frequency ranges: **SLOW** and **FAST**.

LFO frequency is set by the small **SPEED** knob. The corresponding LED will blink in relation to the speed.

BONUS FEATURE: when the switch is on **FAST** position, LFO will be acting on other modulations (envelope down, envelope up, expression pedal).

EG: if **MOD** selector is on envelope up and LFO switch is on **FAST**, the resulting modulation will be an envelope modulated by a LFO. (can be better heard with slower envelopes)

LFO CTRL

With this rotary switch, the LFO rate can be controlled by: (from left to right) none, envelope down, envelope up, expression pedal

In this case, the **SPEED** knob will set the slowest rate. (don't put it fully CW, you wouldn't notice any speed modulation)

FUZZ

It's a basic PNP transistor gated fuzz.

It's placed just before the filters input, switching it on has no affect on **SENS** or on the dry sound.

The **FUZZ** switch turns it on or bypasses it.

The **FUZZ** knob changes the fuzz texture from soft saturation (fully CCW) to hard squared fuzz (fully CW).

The gate starts to engage around 12 o'clock. You'll be able to hear the noise floor disappearing.

EXPRESSION PEDAL / CV

You can control the filters frequencies or LFO rate with external hardware.

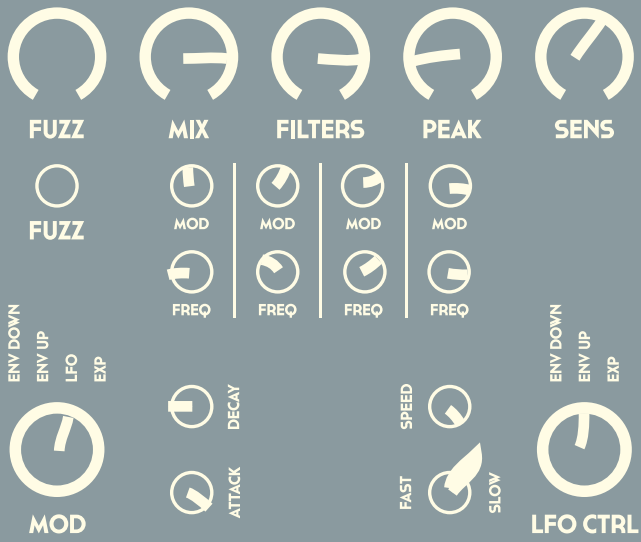
If using a classic/passive expression pedal, use a TRS stereo jack.

If you use CV signal (0-5V), then use a TRS stereo jack with RING detached. (it would temporarily work with a mono jack, but for some reason it's better to use the cable described above)

PHASING

VIBRATO

ENVELOPE LFO



RING

CASCADE

FAST ENVELOPE

ENVELOPE DOWN

ENVELOPE DOWN + LFO

ENVELOPE UP + LFO

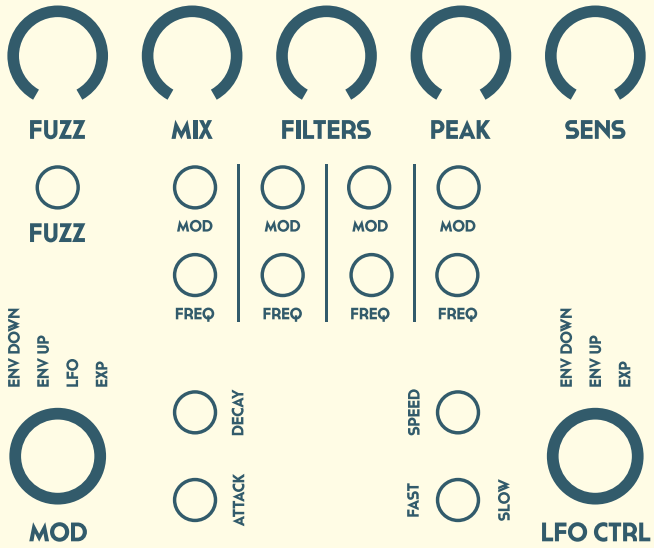
ROTARY

LOW END DISTO

MEDIUM FUZZ

FUZZ + ENVELOPE

SYNTH FUZZ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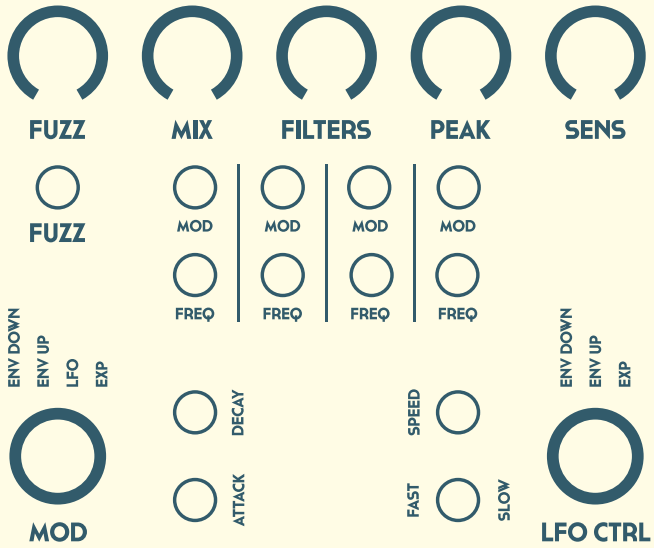
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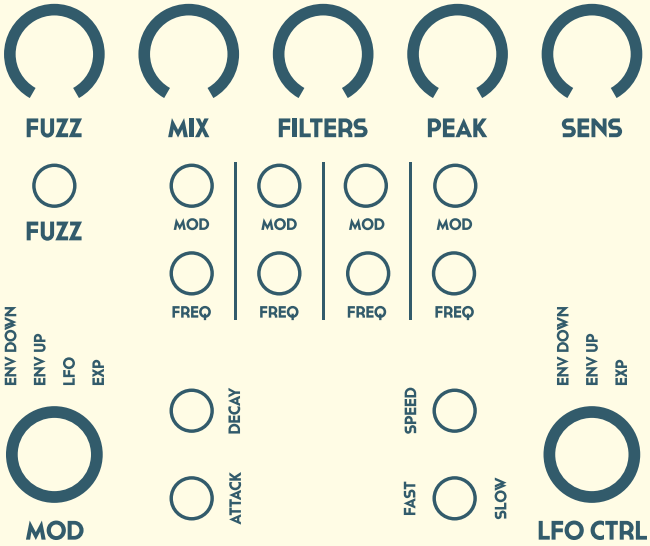
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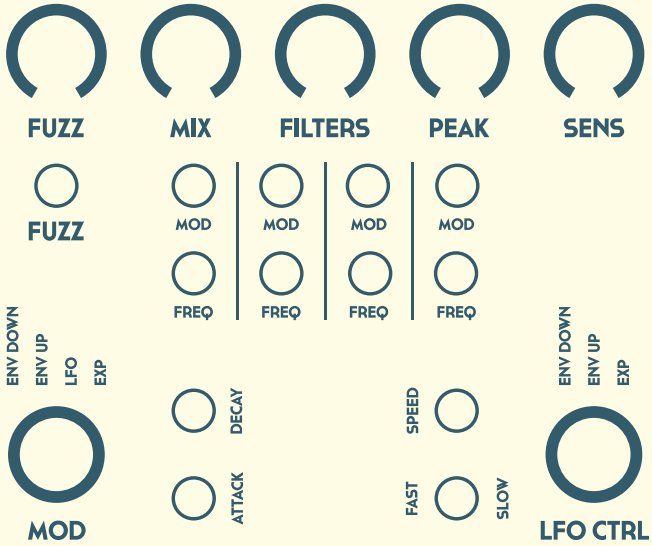
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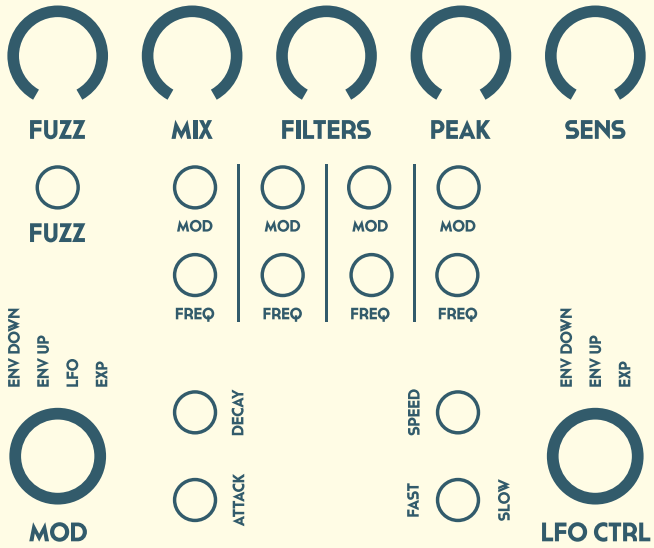
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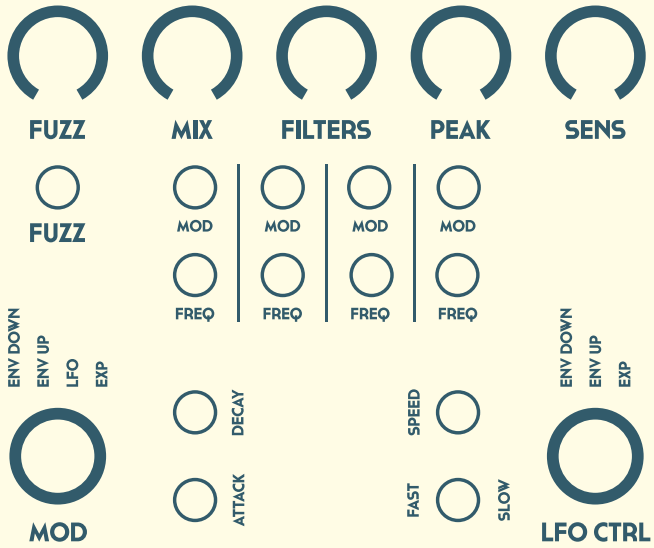
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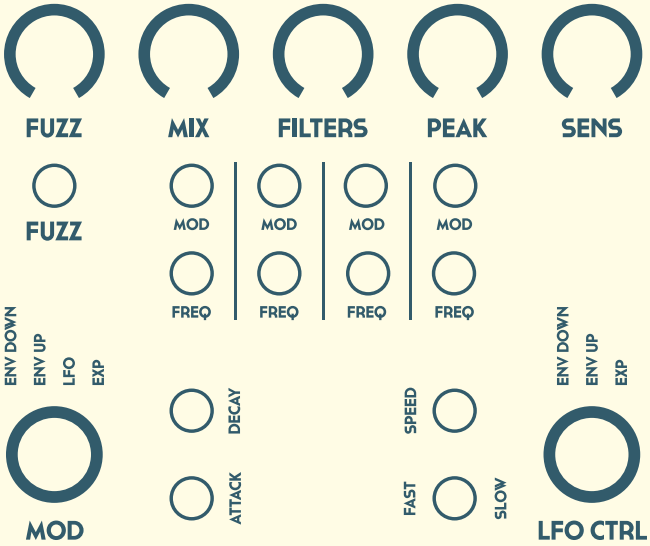
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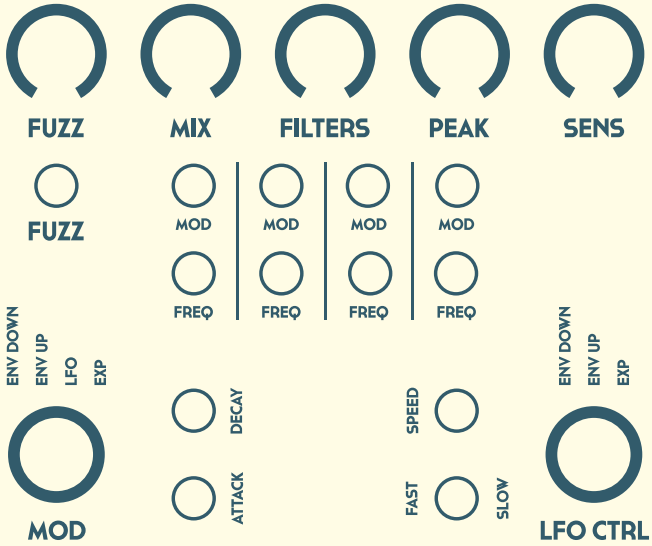
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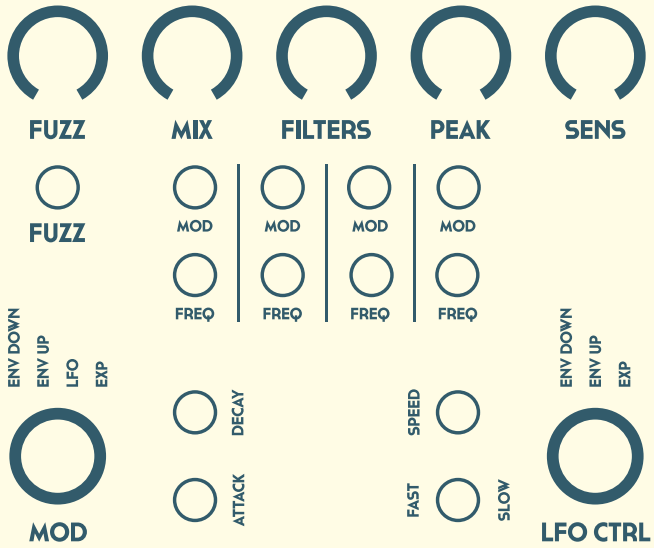
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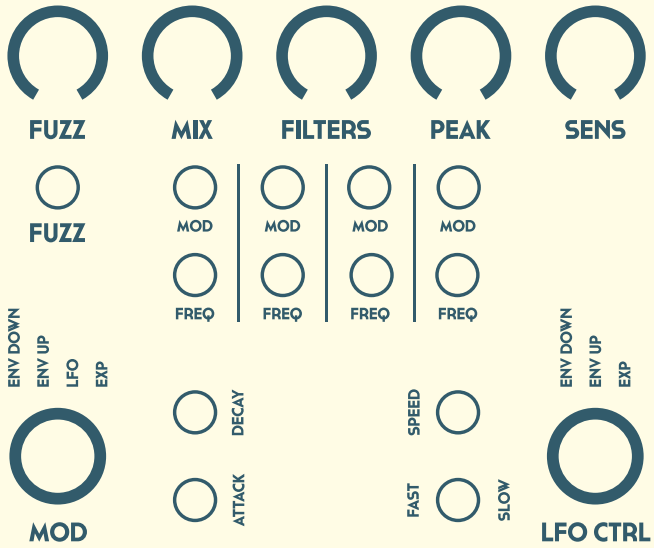
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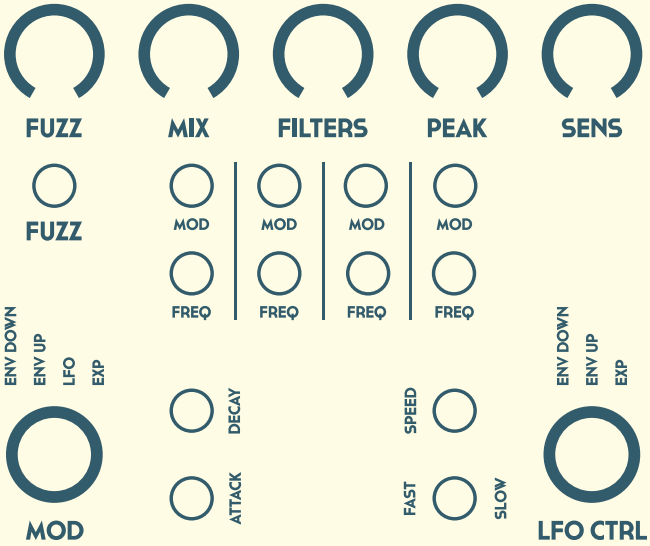
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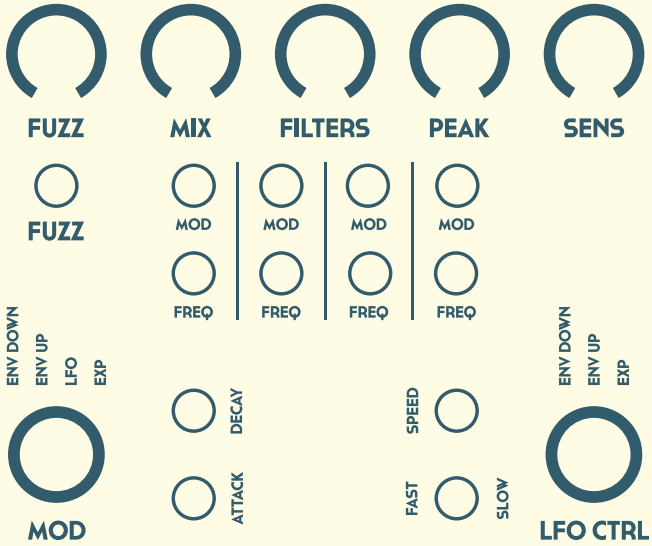
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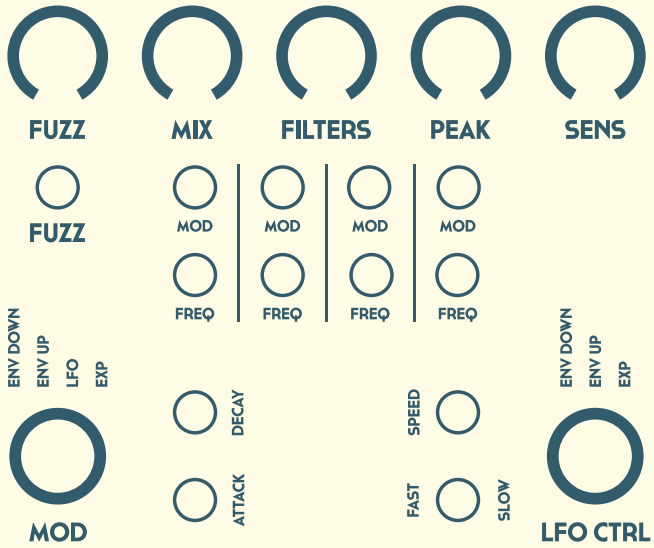
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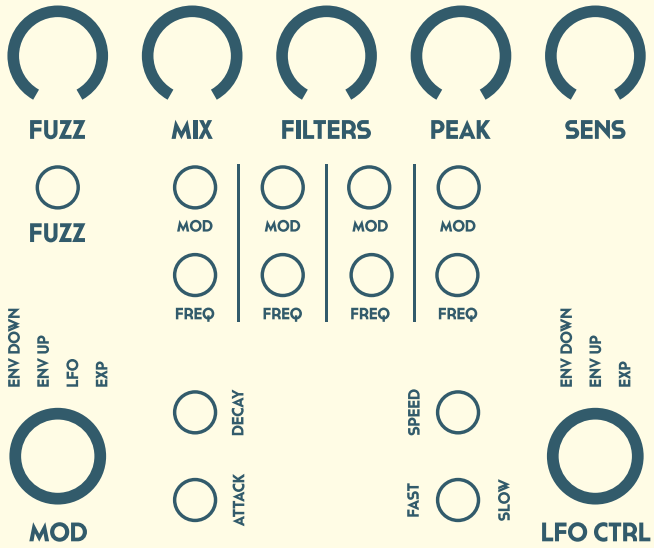
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